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| 09/823,438 | 03/30/2001 | Jonathan Edwards | 2114P016 | 5694 |
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| Zilka-Kotab, PC P.O. BOX 721120 SAN JOSE, CA 95172-1120 | | | PYZOGHA, MICHAEL J | |
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| | | | 2137 | |

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/823,438

Applicant(s)

EDWARDS ET AL.

Examiner

Michael Pyzocha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-11, 17-23, 25-29, 35-41, 43-47 and 53-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11, 17-23, 25-29, 35-41, 43-47 and 53-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-5, 7-11, 17-23, 25-29, 35-41, 43-47, 53-59 are pending.
2. Appeal Brief filed 06/28/2004 has been received and considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11, 17, 19-23, 25-29, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chess et al (U.S. 6,560,632) and further in view of Wong (US 5974465).

As per claims 1 and 19, Chess et al discloses a method, apparatus and virus scanner for prioritizing virus scan requests comprising checking a virus scan request to determine if scanning an object of the request is necessary; and placing the virus scan request on a queue in a priority order based on a characteristic of the virus scan request (see column 3 lines 42-

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56 where sending the file is sending a request for scanning to be done and column 3 lines 18-19).

Chess et al fails to disclose the characteristic including at least one of an identity of the user triggering the virus scan request, a type of the process accessing the object, a time stamp of when the virus scan request was received and an indication of a network node accessing the object wherein the virus scan request is prioritized based on at least one of the user identity being an administrator as compared to a regular user the process type being an operating system as compared to a user application the time stamp being earlier than the time stamps of each scan request previously placed on the queues and the indication being that the object is accessed from a server console as compared to a network client.

However, Wong teaches prioritization based on the user (see column 4 lines 14-40).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Wong's method of prioritization to prioritize the requests of Chess et al.

Motivation to do so would have been that administrator's applications are more important (see Wong column 4 lines 14-40).

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As per claims 2 and 20, the modified Chess et al and Wong system discloses selecting a one of the virus-scan requests from the queue (see column 3 line 65 through column 4 line 5).

As per claims 3 and 21, The modified Chess et al and Wong system discloses the selecting is based on the priority order (see column 3 line 47 through column 4 line 5).

As per claims 4 and 22, the modified Chess et al and Wong system discloses the selecting is based on the characteristic of the virus scan request (see column 3 line 47 through column 4 line 5).

As per claims 5 and 23, the modified Chess et al and Wong system discloses scanning the object of the selected virus scan request (see column 4 lines 6-13).

As per claims 7 and 25, the modified Chess et al and Wong system discloses the priority order is further based on comparing the characteristic of the virus scan request with the characteristics of the virus scan requests previously placed on the queue (see column 3 lines 48-64).

As per claims 8 and 26, the modified Chess et al and Wong system discloses the priority order is further based on a parameter indicating which of the compared characteristics is given higher priority (see column 3 lines 48-64).

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As per claims 9 and 27, the modified Chess et al and Wong system discloses the selecting is further based on comparing the characteristics of the virus scan requests placed in the queue (see column 3 line 48 through column 4 line 5).

As per claims 10 and 28, the modified Chess et al and Wong system discloses the selecting is farther based on comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned (see column 4 lines 9-13).

As per claims 11 and 29, the modified Chess et al and Wong system discloses the selecting is further based on a parameter indicating which of the compared characteristics is given higher priority (see column 4 lines 9-13).

As per claims 17 and 35, the modified Chess et al and Wong system discloses the scanning is necessary when a virus scan status indicates the object is not known to be virus free (see figure 3).

5. Claims 18 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Chess et al and Wong system as applied to claims 1 and 19 above, and further in view of McAfee (webpage).

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As per claims 18 and 36, the modified Chess et al and Wong system discloses scanning is necessary when the object of the virus scan request is in not excluded from virus scanning, but fails to disclose the object being a directory.

However, McAfee teaches scanning a directory when it is not excluded from virus scanning (see the bottom of page 8).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply the modified Chess et al and Wong's method for virus scanning to a directory as taught in McAfee.

Motivation to do so would have been to allow the user to scan a particular directory (see McAfee bottom of page 6).

6. Claims 37-41, 43-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Chess et al and Wong system as applied to claims 1 and 19 above, and further in view of "Reserved-Checkout for Versioned Object" IBM 1993 (herein after IBM).

As per claim 37, the modified Chess et al and Wong system fails to disclose at least two of the characteristics.

However, IBM teaches a method of prioritizing based on timestamps (see page 3).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use IBM's method of

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timestamp prioritization in the modified Chess et al and Wong priority based virus-scanning system.

Motivation to do so would have been to choose between objects with the same priority (see IBM page 3).

As per claim 38, the modified Chess et al, Wong and IBM system discloses selecting a one of the virus-scan requests from the queue (see column 3 line 65 through column 4 line 5).

As per claim 39, the modified Chess et al, Wong and IBM system discloses the selecting is based on the priority order (see column 3 line 47 through column 4 line 5).

As per claim 40, the modified Chess et al, Wong and IBM system discloses the selecting is based on the characteristic of the virus scan request (see column 3 line 47 through column 4 line 5).

As per claim 41, the modified Chess et al, Wong and IBM system discloses scanning the object of the selected virus scan request (see column 4 lines 6-13).

As per claim 43, the modified Chess et al, Wong and IBM system discloses the priority order is further based on comparing the characteristic of the virus scan request with the characteristics of the virus scan requests previously placed on the queue (see column 3 lines 48-64).

As per claim 44, the modified Chess et al, Wong and IBM system discloses the priority order is further based on a parameter indicating which of the compared characteristics is given higher priority (see column 3 lines 48-64).

As per claim 45, the modified Chess et al, Wong and IBM system discloses the selecting is further based on comparing the characteristics of the virus scan requests placed in the queue (see column 3 line 48 through column 4 line 5).

As per claim 46, the modified Chess et al, Wong and IBM system discloses the selecting is farther based on comparing the characteristics of the virus scan requests placed in the queue with the characteristics of the previously selected virus scan requests whose objects are currently being scanned (see column 4 lines 9-13).

As per claim 47, the modified Chess et al, Wong and IBM system discloses the selecting is further based on a parameter indicating which of the compared characteristics is given higher priority (see column 4 lines 9-13).

As per claim 53, the modified Chess et al, Wong and IBM system discloses the scanning is necessary when a virus scan status indicates the object is not known to be virus free (see figure 3).

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7. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Chess et al, Wong and IBM system as applied to claim 37 above, and further in view of McAfee (webpage).

As per claim 54, the modified Chess et al, Wong and IBM system discloses scanning is necessary when the object of the virus scan request is in not excluded from virus scanning, but fails to disclose the object being a directory.

However, McAfee teaches scanning a directory when it is not excluded from virus scanning (see the bottom of page 8).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply the modified Chess et al, Wong and IBM's method for virus scanning to a directory as taught in McAfee.

Motivation to do so would have been to allow the user to scan a particular directory (see McAfee bottom of page 6).

8. Claims 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Chess et al, Wong, IBM system as applied to claim 37 above, and further in view of "Chapter Thirteen Performance Tuning" (webpage) (hereinafter Performance) and further in view of Using NetWare 3.12 (webpage) (hereinafter NetWare).

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As per claim 55, the modified Chess et al, Wong and IBM system fails to disclose using all of the characteristics for prioritization.

However, Performance teaches prioritization based on process types (see page 4) and Netware teaches prioritization based on network node type (see page 7).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use Performance's method of prioritization based on process types and NetWare's method of prioritization based on network node type in the modified priority based virus-scanning method of the modified Chess et al, Wong, and IBM.

Motivation to do so would have been to define and eliminate system bottlenecks (see Performance page 1) and to prevent the reception of user sent messages (see NetWare page 7).

As per claim 56, the modified Chess et al, Wong, IBM, Performance, and NetWare system discloses selecting a one of the virus scan requests from the queue (see Chess et al column 3 line 65 through column 4 line 5).

As per claim 57, the modified Chess et al, Wong, IBM, Performance, and NetWare system discloses the selecting is based on the priority order (see Chess et al column 3 line 47 through column 4 line 5).

As per claim 58, the modified Chess et al, Wong, IBM, Performance, and NetWare system discloses the selecting is based on the characteristic of the virus scan request (see Chess et al column 3 line 47 through column 4 line 5).

As per claim 59, the modified Chess et al, Wong, IBM, Performance, and NetWare system discloses scanning the object of the selected virus scan request (see Chess et al column 4 lines 6-13).

Response to Arguments

9. In view of the appeal brief filed on 06/28/2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth above.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

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10. Applicant's arguments filed 06/28/2005 have been fully considered but they are not persuasive.

With respect to claims 1, 2, 17, 19, 20 and 35, Appellant argues that Chess fails to teach placing the virus scan requests on a queue in a priority order because Chess only teaches classifying queries already queued; Wong fails to disclose placing virus scan requests in a queue based on an identity of the user triggering the virus scan request; and that Chess and Wong are non-analogous art.

Regarding Appellant's argument that Chess fails to teach placing the virus scan requests on a queue, Chess teaches that the prioritization step is classifying queries or files already queued. By definition a queue (taken from Microsoft Press Computer Dictionary Second Edition, 1994) is, "a multielement data structure from which (by strict definition) elements can be removed only in the same order in which they were inserted." So for Chess to prioritize the queries or files already queued they must be taken off of the queue and placed back on the queue in the correct priority order.

Regarding Appellant's argument that Wong fails to disclose placing virus scan requests in a queue based on an identity of the user triggering the virus scan request, Wong teaches prioritization based on the identity of a user as seen in column

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4 lines 14-41. When combined with the system of Chess these users are the users that are sending (triggering) the virus scan requests of Chess.

Regarding Appellant's argument that Chess and Wong are non-analogous art, Chess relates to a distributed security system that uses a network (see column 3 lines 5-23) and Wong is a system for prioritizing network data packets. Since Chess and Wong both relate to systems over a network they are analogous art.

With respect to claims 3, 4, 9, 21, 22 and 27, Appellant argues that Chess fails to teach that selecting is based on priority and the characteristic of the scan request.

Regarding Appellant's argument that Chess fails to teach that selecting is based on priority and the characteristic of the scan request, Chess teaches selecting one of the requests from the queue (column 3 line 47 through column 4 line 5), and then prioritizing based on the selected requests. Once one the queue they must be taken off of the queue in the same order (from the definition of queue above). Since they are placed on an order based on priority and characteristics, Chess discloses the claimed limitations.

With respect to claims 5 and 23, Appellant argues that Chess fails to disclose scanning the object.

Regarding this argument, Chess discloses a step of determining if the object is malicious (column 4 lines 9-13) and this step is equated to Appellant's scanning step.

With respect to claims 7, 8, 10, 11, 25, 26, 28 and 29, Appellant argues that Chess fails to disclose comparing characteristics of objects already on the queue and comparing characteristics of those previously on the queue. However, Chess teaches clustering and updating which correspond to the already on the queue and previously on the queue.

Appellant's arguments with respect to claims 37, 38 and 53 are moot in view of new grounds of rejection.

With respect to claims 39, 40 and 45, similar logic as used in claims 3, 4, 9, 21, 22 and 25 above is again used.

With respect to claim 41, similar logic as used in claims 5 and 23 above is again used.

With respect to claims 43, 44, 46 and 47, similar logic as used in claims 7, 8, 10, 11, 25, 26, 28 and 29 above is again used.

With respect to claims 55 and 56, Appellant argues that Performance and Netware fail to teach the type of process (user vs. operating system) accessing the object or network node (server console vs. network client) accessing the object.

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Regarding these arguments, Performance and Netware are only relied upon for their teachings of basing priority on characteristics. When applied to the prioritization system of the modified Chess we obtain the processes/nodes accessing the objects.

With respect to claims 57 and 58, similar logic as used in claims 7, 8, 10, 11, 25, 26, 28 and 29 above is again used.

With respect to claim 59, similar logic as used in claims 5 and 23 above is again used.

Any claims not specifically addressed were only argued based upon a claim which it depended from and no new arguments where brought up.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

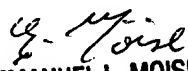
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the

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organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER